



## Abstract

**Grant Number:** 1R01NR005341-01A1

**PI Name:** MELKUS, GAIL

**PI Email:** [gail.melkus@yale.edu](mailto:gail.melkus@yale.edu)

**PI Title:**

**Project Title:** Self Care Interventions for Black Women with Type 2DM

**Abstract:** *DESCRIPTION (provided by applicant): Black women experience one of the highest rates of type 2 diabetes mellitus (DM) and suffer disproportionately from diabetes related complications. Diabetes is now the second leading cause of death among black women. This can be attributed to poor diabetes control often due to sub-standard diabetes care and lack of diabetes education and self-management skills. The purpose of this study in black American women with type 2 DM is to evaluate the effect of a tested, culturally sensitive intervention of diabetes education, coping skills training (CST), and diabetes care designed to improve glycemic control and to empower them with the knowledge and skills necessary to assume self-management. The study is designed to: (1) determine the effect of the experimental intervention on glycemic control, specifically Hemoglobin Alc, by comparing it to a control group of conventional care at baseline, 3, 6, 9, 12, 24 and 36 months; (2) to determine the relationship of weight (BMI), lipid levels, blood pressure and the primary outcome of glycemic control; and (3) to determine the effect of the experimental intervention on self-efficacy with diabetes self-management and quality of life. Black women (N=129) with type 2 DM will be randomized to one of two groups: (1) a 6 week culturally sensitive cognitive-behavioral diabetes education program, followed by 5 weeks of CST and diabetes care visits, or (2) conventional care of a 5 week standard diabetes education program, 5 weekly patient-generated discussion sessions and diabetes care visits. Care will be the same for both groups and will be based on a treatment algorithm consistent with ADA care guidelines. The culturally sensitive education program will be led by advanced practice nurses trained in use of the program. Nurse practitioner and physician teams from collaborating primary care centers will see all subjects for care visits. Data will be collected at baseline 3, 6, 9, 12, 24, and 36 months.*

*We hypothesize that women who receive the experimental intervention will have significantly better glycemic control, and will have significantly greater self-efficacy with diabetes self-management and quality of life compared to women receiving conventional diabetes education and care. Data analysis specific to each study aim will be conducted using ANOVA and multiple regression. The findings from this study will benefit the health outcomes of black American women, who most often are cared for by primary care providers, in various health care settings throughout the trajectory of type 2 DM. Health care settings, particularly primary care centers, will benefit from a tested, model intervention of diabetes care that will improve diabetes outcomes and contribute to decreasing the personal and public health burden of the disease.*

***Thesaurus Terms:***

*African American, cognitive behavior therapy, female, human therapy evaluation, noninsulin dependent diabetes mellitus, self care, women's health blood glucose, blood lipid, blood pressure, body weight, coping, culture, diabetes education, hemoglobin A, longitudinal human study, medically underserved population, outcomes research, quality of life human subject, patient oriented research*

**Institution:** YALE UNIVERSITY  
NEW HAVEN, CT 06520

**Fiscal Year:** 2001

**Department:** NONE

**Project Start:** 01-JUL-2001

**Project End:** 31-MAR-2006

**ICD:** NATIONAL INSTITUTE OF NURSING RESEARCH

**IRG:** NURS

